



2030

LONG RANGE TRANSPORTATION PLAN

Executive Summary

Introduction

*Purpose:
Develop and
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Transportation influences community development, quality of life, and economic growth. Long range transportation planning is a guide to how the area will manage multi-modal transportation in the future based on current and past trends. The Wichita Area 2030 Long Range Transportation Plan (LRTP) addresses all modes of transportation as well as the safety and security of the region's transportation system providing guidance and direction for infrastructure decisions.

This Plan provides a review of existing conditions in the planning region and identifies future needs, supporting regional goals and objectives.

The Plan also addresses public involvement and policy issues related to the environment, equity in transportation, land use, and project funding.



Demographics and Trends

By 2030 the Wichita area can expect the population to increase by 123,000 new residents for a total population of 583,733. The number of households is anticipated to rise to more than 48,000 in the next 25 years, while the anticipated number of jobs is estimated to increase to 328,500.

The anticipated growth will result in higher traffic on the roads and a growing need for goods and services, stressing the relationship between modes and integration of a system that meets the access and mobility needs of an expanding region.

Planning Area

The Wichita Area Metropolitan Planning Organization serves as the transportation planning organization (MPO). MPOs are federally mandated for urbanized areas whose population is greater than 50,000. Local and state governments work through the MPO to develop regional transportation plans and programs. The regional planning area was expanded after the 2000 Census to include the City of Andover in Butler County and the City of Mulvane in Sumner County. The 2030 LRTP is a transportation planning tool for the expanded region.

Goals and Objectives

The 2030 long range L RTP is guided by a set of goals developed from public and stakeholder input. The goals link the transportation planning process to the selection and implementation of individual projects.

Each of the goals is linked to federal transportation legislation and seeks to accomplish the following guiding purpose:

Develop and maintain a multimodal transportation system that serves regional needs, promotes safety, supports economic development, and provides personal choice in the movement of people and goods.

- **Goal 1:** Improve mobility and provide convenient access to all modes of travel that make up the region's transportation system.
- **Goal 2:** Minimize the effects/impacts of transportation on the natural and human environment, promote energy conservation, and improve the quality of life within the region.
- **Goal 3:** Provide and maintain a roadway network that meets the transportation needs of people and goods in the region and that promotes safety, convenience, and aesthetics.

- **Goal 4:** Provide an effective, efficient, and convenient public transportation system for planning area residents and visitors that contributes to the economic development and quality of life of the community.
- **Goal 5:** Provide a safe, efficient, and convenient bicycle and pedestrian system that is an integrated part of a multimodal transportation system.
- **Goal 6:** Promote the safe and efficient movement of goods on the region's rail and highway systems.
- **Goal 7:** Ensure the area is adequately serviced with general and commercial aviation facilities and services, and mitigate any negative operational impacts of the airport activities within the community.
- **Goal 8:** Improve the safety and security of the region's transportation system.
- **Goal 9:** Ensure an integrated approach to transportation and land use planning.
- **Goal 10:** Promote deliberate and sustained regional planning and collaboration for transportation system management and operations.

Finances for the Future

WAMPO has estimated that in the next 25 years there will be approximately \$2.42 billion dollars available for transportation related activities. The amounts listed below reflect anticipated costs to the system as outlined in the 2030 L RTP.

Estimated Project Costs – WAMPO Area (2005-2030)

| Projects | Estimated Costs (2005 \$) |
|------------------------------------|---------------------------|
| Highways, Streets, & Roads | \$1.8 billion |
| Bridges | \$196 million |
| Intelligent Transportation Systems | \$34 million |
| Bicycle & Pedestrian Facilities | \$17.3 million |
| Public Transportation | \$349 million |

Public Involvement

A variety of opportunities and channels of communication were employed for Wichita area citizens, public agencies, transportation agencies, freight transportation providers and other stakeholders to review materials and offer their ideas and opinions related to the 2030 L RTP Update. Tools such as newsletters, "clip-and-send" comment forms, public meetings, free shuttle service to meetings, face-to-face interviews, a formalized discussion guide, and a project Web site were used to provide a two-way channel of information on the L RTP process, issues, suggestions from the public, and access to the draft plan for review.



Key Issues

The 2030 LRTP brought many issues to the forefront. Some of those included:

US-54/400 Freeway: US-54/400 (Kellogg) should continue to be upgraded to a freeway across Sedgwick County and through the City of Andover.

Wichita-Valley Center Floodway Crossings: The floodway creates a barrier to east-west traffic flow. Additional crossing points are studied and recommended.

South Area Transportation Study: Many communities in the southern portion of the planning area are interested in the potential to improve mobility and access to this region. A "South Area Transportation Study" will be initiated in the fall of 2005 to determine the benefits of a South Bypass or other transportation improvements, the impacts on land use, and a preferred alignment and right-of-way requirements if a bypass is recommended.

Freeway Interchanges: A number of freeway interchanges along Kellogg (US-54/400), I-135, and I-235 are experiencing traffic congestion during peak periods each day. The LRTP recommends studies to determine and implement appropriate improvements for these locations.

Access for Metropolitan Cities: Many communities stressed the importance of maintaining good roadway connections between cities and from cities to the highway system. The number of access points along these routes should be controlled to protect mobility (traffic flow).

Congestion on the Roadway System: A number of roadways in the planning area are congested during peak traffic periods. The region's travel demand model has been updated to represent conditions in the year 2030 and used to analyze current and future areas of congestion. Recommendations for roadway capacity improvements are included in the LRTP.

Bicycle/Pedestrian Facilities: Many comments were received to connect existing sections of

bicycle/pedestrian trails and to expand the bicycle facilities in the planning area. Circulation and access to shopping malls, schools, offices and mixed use developments should be analyzed to help identify opportunities for connecting bicycle and pedestrian facilities and providing opportunities for travel to work, school, and home.

Rail: Study the needs for improvements at roadway/railroad crossings. Such improvements can be achieved through physical construction, but also public education efforts such as Operation Lifesaver should be encouraged. At-grade railroad/street crossings continue to be a concern for locations in Wichita and other cities in the metropolitan area. The concerns were for the delays to motor vehicle traffic (especially emergency vehicles) caused by trains and for safety at the crossings.

Intermodal Freight Facilities: A number of comments were received suggesting the need to study and develop an intermodal freight facility within the region. The region is a crossing point for freight carried by highway, rail, and air.

Aviation: Air passenger and air cargo services are key elements of a vibrant and diverse economy and are important to maintaining the quality of life in the community. Routine maintenance and upgrades to the area's airports and approaching roadways will be vital to support the projected increase in passengers and freight. Areas surrounding the airports need to be protected from incompatible development.

Public Transportation: Support the development of the TDP to determine potential improvements to the public transportation system. Identify funding to implement a pilot project for evening public transportation service. Investigate the use of Intelligent Transportation System (ITS) technologies such as Automatic Vehicle Location (AVL), automatic stop announcement, computerized scheduling, real-time bus information at bus stops, wireless communications, and bus traffic signal priority.

Highways, Streets, and Roads

Highways, streets, and roads form the primary transportation system for the region. Currently vehicles travel 11 million miles each day on the planning area's road system. By the year 2030, travel will increase to over 14 million miles a day. A travel demand model for the planning area was used to analyze current and future traffic flows and congestion.



Recommendations:

- **South Area Transportation Study:** Study the potential to improve mobility and access to the southern portion of the planning area.
- **I-235 & Kellogg (US-54/400) and I-235 & Central Interchanges:** Study to determine future improvement needs, interim and ultimate improvements, and the impact of those improvements on the community.
- **Interchange Transportation Studies:** Study interchanges along I-135 and I-235 to determine future improvement needs, interim and ultimate improvements, and the impact of those improvements on the community.
- **Kellogg (US-54/400):** Continue to upgrade Kellogg to a freeway across Sedgwick County and through the City of Andover.
- **Wichita-Valley Center Floodway Crossings:** A number of alternatives were analyzed to resolve the barrier created by the floodway. New crossings at 13th Street and 25th Street are recommended.
- **Street and Road Congestion:** The travel demand model was used to analyze current and future areas of traffic congestion. The congestion management policy and a criteria-based project selection process should be followed to identify projects to be included in the TIP.
- **Access Control/Corridor Management:** Access management/control policies are recommended to protect the mobility function of key roadways and to provide for the safe movement of traffic. Key corridors include those that connect cities in the metropolitan area and those that connect cities to the state highway system.

Public Transportation

Public transportation also plays a very important role for many residents and businesses in the region. Wichita Transit provides a basic fixed route bus service and associated paratransit service for the City of Wichita. The primary suggested improvement was for evening service. Rural areas provide service to the elderly and persons with disabilities, as well as the general public utilizing funds from federal, state, and local sources.

Annually, Wichita Transit carries approximately 1.9 million passengers on the fixed route buses and over 330,000 rides for persons with disabilities with the paratransit service.

Transit-Oriented Development (TOD) is the design and development of land in proximity to transit facilities, such as major fixed route transfer points or park and ride lots that encourage people to use mass transit. The region should consider the concept of TOD to build communities that provide



the convenience and availability of transit, linking people and their jobs as well as commercial, retail, medical, and entertainment centers.

Wichita Transit is preparing to update its Transit Development Program (TDP), a five-year plan for the operation of public transportation in the Wichita urban area. The TDP will investigate a number of issues including a determination of current and future transit needs, ways to improve operational efficiencies, potential expansion of transit service, bus-only facilities, park and ride facilities, marketing, and funding.

Recommendations:

- **Transit Development Program:** Support the development of the TDP to determine potential improvements to the public transportation system.
- **Evening Service:** Identify funding to implement a pilot project for evening public transportation service.
- **Technologies:** Investigate the use of Intelligent Transportation System (ITS) technologies, such as Automatic Vehicle Location (AVL), automatic stop announcement, computerized scheduling, real-time bus information at bus stops, wireless communications, and bus traffic signal priority.
- **Transit Service to Outlying Cities:** Outlying cities in the metropolitan area should investigate the availability of federal, state, and local funds to establish service.

Bicycle and Pedestrian Facilities

Federal legislation states: *Bicyclists and pedestrians shall be given due consideration in the planning process, and bicycle facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities except where bicycle use and walking are not permitted.*

Bicycle paths provide completely separated rights of way designated for the exclusive use of bicycles and in some cases pedestrians. Bicycle routes share the roads with motor vehicle traffic and may be signed and marked. Walking is a fundamental form of transportation that is an

integral part of the health and livability of communities in the region. The WAMPO region has approximately 433 miles of documented sidewalks.

The 1996 Park and Open Space Master Plan identified significant deficiencies for parks and trails at a regional level. The LRTP suggests expanding the non-motorized system to include more on-street facilities as well as targeting greater bicycle and walking opportunities.

Transportation Enhancement (TE) funds have been the major source of funding for the trail system.

Recommendations:

- **Fill Gaps:** To make bicycling and walking effective methods of transportation, the facilities that serve bicyclists and pedestrians should be continuous and connected. Data for existing bicycle and pedestrian facilities should be collected and gaps in the systems should be identified and prioritized for improvement.
- **Land Use Connections:** Circulation and access to shopping malls, schools, offices, and mixed use developments should be analyzed to help identify opportunities for connecting bicycle and pedestrian facilities.
- **Target Opportunities:** The Census Transportation Planning Package helps to target existing areas used by pedestrians and cyclists as well as opportunities based upon duration of trips. A review of all workers who travel less than five minutes from home to work would help target where facilities could attract more users.

Additional Recommendations

Rail Transportation and Freight Movement

- **Roadway/Railroad Crossings:** Study the need for improvements at roadway /railroad crossings. Such improvements can be achieved through physical construction, and public education efforts, such as Operation Lifesaver, should be encouraged.
- **Intermodal Facility:** Support the feasibility study for an International Trade Processing Center.



Aviation

- **Maintenance:** Support routine maintenance and upgrades to the area's airports and approaching roadways.
- **Land Use:** Protect areas surrounding the airports from incompatible development.

Safety and Security

- **Safety:** WAMPO should work with KDOT, FHWA, and FTA to study the types of traffic accidents that occur in the planning area and develop a plan to reduce accident numbers and severity.
- **Security:** WAMPO and the region's ITS Committee should identify critical transportation infrastructure and consider ITS applications that may improve security of the transportation system.

Intelligent Transportation Systems (ITS)

- **Projects:** Support the implementation of the ITS projects identified in the recently approved Regional ITS Architecture.
- **Architecture:** The ITS Architecture Technical Committee should continue to meet to administer and update the region's ITS Architecture.

Decision Making

Decisions for transportation investments require the consideration of a variety of inputs. It is important that decisions consider land use impacts on transportation, alternative strategies to address roadway congestion, and project selection criteria so that the goals and objectives of the LRTP are achieved.

Land Use and Transportation Coordination:

Development decisions are usually made on a local municipal basis. Large-scale transportation decisions, however, are generally made on a regional basis. Coordination of these two types of decisions is necessary to ensure the even and successful development of both.

Congestion Management System: Federal regulations require urban areas with a population of more than 200,000 to develop, establish, and implement a Congestion Management System (CMS). The CMS monitors the system, sets

performance measures, identifies areas of congestion, implements mitigation strategies, and evaluates their effectiveness. WAMPO adopted a CMS Policy in February 2005.

Project Selection Criteria: Project Selection Criteria are being developed in conjunction with the LRTP Update to help decision makers achieve the goals and objectives of the plan. These criteria provide a quantitative means of evaluating, comparing, and prioritizing projects for street, intersection, and bridge improvements.



Air Quality

The Wichita metropolitan area is currently considered to be in “attainment,” meeting or exceeding air quality requirements. If the area were to fall into non-attainment, the state would be required to develop a State Implementation Plan (SIP) detailing regulations for reducing automobile and other pollution source emissions. Metropolitan area transportation plans would be required to make certain that projects improve air quality rather than harm it.

If in non-attainment, WAMPO would be required to conduct “conformity” analysis on all plans (i.e., the LRTP, the Transportation Improvement

Program [TIP], and projects) before the plans could be accepted by the U.S. DOT. This conformity analysis uses a mathematical model that predicts the impacts of future projects on air quality and would need to be conducted every three years or when a new plan or plan amendment is proposed.

In the future, if the WAMPO area were classified as non-attainment, the LRTP would be revised to include more projects that reduce vehicle emissions and promote activities that support that end. Strategies to reduce motor vehicle use include ridesharing, transit services, and increasing non-motorized (bicycle and pedestrian) trips.